

[Simplified Antenna Structures for Logging Tools]

Abstract of Disclosure

The invention relates to antenna configurations for electromagnetic logging tools. The antennas have one or more electrical conductors disposed on a dielectric core. The conductor is formed on the core through plating or deposition processes and arranged such that the antenna has a first magnetic dipole moment substantially perpendicular to a longitudinal axis of the core. One embodiment includes an antenna adapted for mutual balancing using interleaved conductive paths or disks to alter the magnetic dipole moment to mutually balance the antenna system. The invention also relates to a method for producing such antenna structures.

Figures